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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,418

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Mark Thomas Johnson

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

SAID, MANSOUR M

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,418	<b>Applicant(s)</b> JOHNSON ET AL.	
	<b>Examiner</b> MANSOUR M. SAID	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, “the extreme positions and intermediate” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

2. Claims 1, 8 and 15 objected to because of the following informalities:

As to claim 1, line four, "a plurality of pixels (2)" should be changed to --"a plurality of pixels (4)"--.

As to claim 8, line two, "a plurality of pixels (2)" should be changed to --"a plurality of pixels (4)"--.

As to claim 1, line three, "a plurality of pixels (2)" should be changed to --a plurality of pixels (4)--.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1, 8, and 15, the claimed limitations such as "occupy a position being of one of extreme positions and intermediate positions" are not clearly stated that if the extreme/intermediate positions are movement of the charged particles or the updated drive waveform. Correction is needed.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Applicant Prior Art (hereinafter referred to as APA)

**As to claims 1, 8 and 15** , as best understood, APA teaches an electrophoretic display panel (figure 1), for displaying a picture corresponding to image information (figure 1 and page 1, paragraph 0002), comprising: a plurality of pixels (figure 1, (4)), each containing an amount of an electrophoretic material comprising a first and a second type of particles (figure 1, (6, 7)) and page 1, paragraph 0002), having mutually different charges, being dispersed in a fluid (figure 1, (11)); a first and a second electrode (figure 1, (8, 9)) associated with each pixel (figure 1 (4)) for receiving a potential difference as defined by an update drive waveform (figures 1-2 and page 1, paragraphs 0002-0005); and drive means (figure 1, (10)), for controlling said update drive waveform of each pixel (figure 1, (4)) 2 and page 1, paragraphs 0002-0005); wherein the charged particles (figure 1, (6,7)), depending on the applied update drive waveform (figure 2), are able to occupy a position being one of extreme positions near the electrodes (figure 1, (8,9)) and intermediate positions in between the electrodes (figure 1, (8,9)) for displaying the picture (figures 1-3 & 5 and page 1, paragraphs 0002-0005), and wherein said update drive waveform comprises: a reset portion (figure 2, (R)), during which a reset signal is applied over the pixel

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(figures 1-2 and page 1, paragraphs 0002-0005), and subsequently a driving portion (figures 1-3, (D)), during which a picture potential difference is applied over the pixel for enabling the particles (figure 1, )6, 7)) to occupy the position corresponding to the image information (figures 1-3 & 5 and page 1, paragraphs 0002-0005), characterized in that said reset portion (figures, 1-3 & 5, (R)) of the update drive waveform is configured so that the first and second types of particles (6,7) are brought in close proximity with each other during said reset portion (figures, 1-3 & 5, (R)) of the update waveform (figure 3 clearly shows the close proximity) (figures 1-3 & 5). An electrophoretic display panel (1) as in claim 1, wherein the reset signal applied in said reset portion (R) comprises a first signal portion (R1) and a subsequent second signal portion (R2).

**As to claims 2 and 9**, as best understood, APA teaches wherein the reset signal applied in said reset portion (R) comprises a first signal portion (R1) and a subsequent second signal portion (R2) (figure 2 shows two part of reset portion, one with positive pulse the second with negative pulse).

**As to claims 3 and 10**, as best understood, APA teaches wherein the said reset portion (R) is configured so that it is bi-polar, i.e. comprises only a first and a second, subsequent reset signal portion (R1 and R2, respectively), one of said signal portions being a positive pulse and the other one being a negative pulse (figure 2 shows two part of reset portion, one with positive pulse the second with negative pulse).

**As to claims 4 and 11**, as best understood, APA teaches wherein the update drive waveform further comprises at least one shaking portion (S) (figure 2, S1 & S2), and wherein said positive and negative reset signal portion each has a duration that is longer than said at least one shaking portion (S) (figure 2).

**As to claims 5 and 12**, as best understood, APA teaches wherein said first reset signal portion (R1) is shorter than said subsequent second reset signal portion (R2) (figure 2 shows two part of reset portion, one with positive pulse the second with negative pulse).

**As to claims 6 and 13**, as best understood, APA teaches first and a second type of particles (6, 7) in a direction away from the extreme positions (figures 3 and 5).

**As to claims 7**, as best understood, APA teaches wherein the duration of the first signal portion (R1) is chosen so that the total duration of that reset portion equals the length of the longest monopolar reset portion needed for a transition in the pixel (figures 2-3 and 5).

### **Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kishi (7,283,119 B2) teaches an electrophoretic display includes unit cells..

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mansour M. Said whose telephone number is 571-272-7679. The examiner can normally be reached on Monday through Thursday from 8:30-6:00 P.M. The examiner can also be reached on alternate Friday from 8:30 a.m. to 5:00 p.m. EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe whose telephone number is 571-272-7681.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

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or faxed to: 571-273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window at the Randolph Building, 401, Dulany Street, Alexandria, VA 22314.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**/Mansour M. Said/**

**3/25/08**

/Richard Hjerpe/

Supervisory Patent Examiner, Art Unit 2629